

MATSUSHIMA et al
Serial No. 10/508,876
January 9, 2007

REMARKS

Applicants' undersigned attorney sincerely appreciates the time and courtesies of the Examiner during the interview of December 6, 2006. The Examiner's Interview Summary Record of that same date appears to adequately reflect the substance of the discussions during the interview and thus further detailed comment thereon is unnecessary.

As an initial "housekeeping" matter, it will be noted that the improper status identifier with respect to pending claim 10 as presented with the Amendment dated October 10, 2006 has been corrected. In this regard, by way of the restriction requirement dated July 10, 2006, claims 1-10 were elected for prosecution, with then pending claim 11 being non-elected for prosecution as directed to a patentably distinct invention. Thus, the status identifier for claim 10 correctly notes its status as an "original" claim, while claim 11 has been identified as "withdrawn".

Since the Examiner has not indicated on the record the status of new claim 12 vis-à-vis the prior restriction requirement, it has been re-presented above. For the reasons advanced in the applicants' Amendment dated October 10, 2006, all claims pending herein, i.e., including claims 11 and 12, should be examined in this application. Thus, applicants again request that the restriction requirement advanced in the July 10, 2006 Official Action be reconsidered and withdrawn for the reasons already of record herein.

By way of the amendment instructions above, independent claims 1 and 9 have each been amended in the manner discussed with the Examiner during the interview of December 6, 2006. Specifically, the preamble expressions for each claim requires that the composition be "suitable for laser welding". As such, each of the independent claims, and the claims dependent therefrom reads on the previously elected invention.

The independent claims 1 and 9 have also been amended substantively to include the subject matter of prior claim 6 and to delete therefrom the species of “styrenic resin (b2)” from the from the Markush group of resin (B). As such claim 6 has been cancelled.

During the interview of December 6, 2006, the Examiner noted that the two Japanese references (i.e., JP 09291204 (hereinafter “D2”) and JP2000007902 (hereinafter “D3”)) “...actually exemplify the isophthalic acid-modified PBT.” The Examiner therefore suggested limiting the type of modification or filing continuation directed toward laser welding.¹ Further to the applicants’ comments in the Amendment dated October 10, 2006, applicants submit the following additional remarks which clarify the patentable differences between the present invention as claimed herein and the JP references.

Reference D2 discloses that a coloring component (E) is essential for the therein disclosed compositions. Specifically D2 discloses that colored shaped articles which do not require a plating layer, a painting layer or the like can be obtained by adding the coloring component (E) to the composition. D2 emphasizes that the species of the dyes or pigments for the component (E) is not particularly limited and can be selected from those conventional for polybutylene terephthalate compositions generally (paragraph [0012]). Among such conventional species of dyes or pigments, carbon black is particularly preferred as well as azo-series, phthalocyanine-series, perylene-series guinacridone-series and anthraguinone-series compounds (paragraph [0012]).

Moreover, all compositions of the Examples and the Comparative Examples in D2 contain carbon black or phthalocyanine blue.

Reference D3 discloses that styrenic resins are essential for the therein disclosed compositions. Specifically, D3 discloses that the addition of a styrenic resin

(B) to a polyester-series resin (A) improves adhesion to the counterpart thereby improving mechanical strength of the shaped articles without raising significantly the melting temperature of the secondary material, even if the composition is used as either one of the primary or secondary materials in a two color molding operation (paragraph [0021]).

Moreover, reference D3 also discloses that when the ratio of the styrenic resin is less than 10 parts by weight, adhesion to the primary material deteriorates because the solidification of the resin composition is fast and the degree of the styrenic resin exuded from the resin composition to the surface thereof is decreased (paragraph [0026]).

Each of the cited references D2 and D3 fails to disclose or suggest the specific resin combination of the resins (A) and (B) having the specific light transmittance in relation to laser welding as defined in the claims pending herein for consideration. Thus, the resin composition of the present invention is novel in over each of D2 and D3.

Moreover, as apparent from the fact that the composition of D2 essentially comprises a coloring component such as a carbon black, it is self-evident that D2 does not embrace at all the concept of providing a composition capable of transmitting a laser beam and/or imparting an ability to the resin composition to be welded by a laser beam. That is, by virtue of the inclusion of *carbon black* as a necessary required species in D2, an ordinarily skilled person would not be directed toward laser-weldable compositions having the light transmittance values as defined in the pending claims herein.

Furthermore, it will be observed that the most important feature of reference D3 resides in the addition of a styrenic resin to a polyester-series resin, from the view point of adhesion to a counterpart. Thus, the resin combinations in relation to laser welding which do not necessarily comprise styrenic resins would never be predicted from D3.

¹ A continuing application is being filed concurrently herewith to pursue subject matter to which the applicants are deemed entitled.

MATSUSHIMA et al
Serial No. 10/508,876
January 9, 2007

The present invention also shows unexpected results. That is, since reference D2 necessarily employs carbon black or other coloring component, laser transmittance of the resultant composition could never be improved and thus the laser welding of the composition or shaped article thereof could never be conducted successfully. Similarly, since the composition of D3 comprises a styrenic resin as an essential component, the laser transmittance or laser weldability of other resin combinations would never be motivated from the disclosure therein.

Contrary to the disclosures in D2 and D3, according to the present invention, since the resin composition comprises a specific combination of components and a specific light transmittance in relation to laser welding as defined in the pending claims, the resin composition exhibits high light transmittance relative to a laser beam and thus exhibits excellent laser weldability properties. Therefore, a shaped article formed from the resin composition of the present invention can be easily bonded to a counterpart by laser irradiation to form a composite article. Such a result could never be predicted from the cited references D2 and D3.

For the reasons noted above and those already of record herein, applicants suggest that all pending claims are in condition for allowance and Official Notice to that effect is solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

Bryan H. Davidson
Reg. No. 30,251

BHD:bcf
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100